REMARKS/ARGUMENTS

Reconsideration is requested of the rejection of claims 1 through 3 under 35 U.S.C. 102(b) as being anticipated by Saito et al. (6,112,402):

Regarding our claim 1; as currently amended, it reads as follows:

1. A method to form a magnetically pinned layer, comprising:

providing a layer of antiferromagnetic material having a top surface and an edge that is different from said top surface; and

depositing a layer of magnetic material, a part of which contacts both said top surface and said edge, thereby forming said magnetically pinned layer.

Examiner will have noted that the end product of the method recited in claim 1, namely a magnetically pinned layer, is now explicitly mentioned in the body of the claim. As a consequence, Saito et al. (6,112,402) is rendered invalid as prior art that anticipates the present invention. In fact, Saito et al. teaches away from the present invention because Saito describes a method for stabilizing the edges of a magnetically FREE layer. Both examiner and Saito note that layer 3, which is between the two inside edges of antiferromagnetic layer 10, is a free layer. Neither the present invention nor Saito's would work if their free and pinned layers were interchanged.

Reconsideration is requested of the rejection of claim 4 under 35 U.S.C. 103(a) as being unpatentable over the combination of Saito et al., Tobise et al. (5,748,416) and Gill (6,097,579):

As was done for claim 1, claim 4 now explicitly mentions in the body of the claim that the end product of the method is a pinned layer. Since, as already noted in our discussion of amended claim 1, Saito teaches a method for connecting an antiferromagnetic layer to a free layer, no combination of Saito with any other reference, including Tobise et al. and Gill, can render the present invention unpatentable.

Reconsideration is requested of the rejection of claim 6 under 35 U.S.C. 103(a) as being unpatentable over the combination of Saito et al., Tobise et al. and Gill and further in view of Hasegawa (5,910,344):

Examiner states that "ferromagnetic layers (e.g. 42, 44) can be 'antiparallel' in magnetizations (see a and b directions in Fig. 3).....". This is incorrect. It is clear from the symbols used to denote the directions (→ for a and ⊗ for b) that they are not antiparallel, but orthogonal. Furthermore in col. 6 lines 12 to 18 (cited by examiner) Hasegawa states "In the present invention, the magnetization of the ferromagnetic layer having **pinned** magnetization reversal is preferably substantially **perpendicular** to the magnetization of the ferromagnetic layer having **free** magnetization without an external magnetic field...." (emphasis added).

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

Saile Ackerman LLC
28 Davis Avenue
Poughkeepsie
NY 12603

By 

Stephen B. Ackerman
Reg. No. 37761